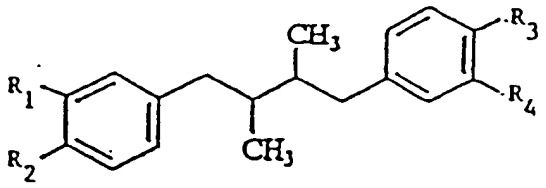
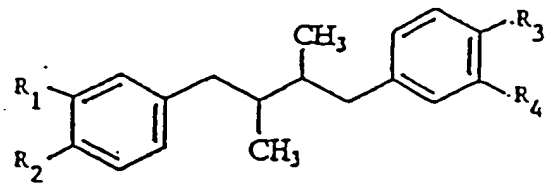
WHAT IS CLAIMED IS:

1. A method of inhibiting survivin production in a eukaryotic cell cycle comprising administering an effective amount of a compound of formula



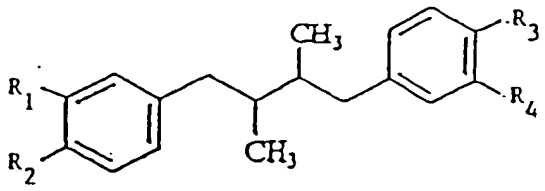
wherein R_1, R_2, R_3 and R_4 independently represent –OH, OCH_3,-O(C=O)CH_3, or an amino acid residue, but are not each –OH simultaneously.

2. The method of claim 1 wherein said cell is an animal cell.
3. The method of claim 3 wherein said cell is a mammalian cell.
4. The method of claim 4 wherein said cell is a human cell.
5. A method of stimulating apoptosis in a cell expressing CDC-2 and survivin comprising administering an effective amount of a compound of formula



wherein R_1, R_2, R_3 and R_4 independently represent –OH, OCH_3,-O(C=O)CH_3, or an amino acid residue, but are not each –OH simultaneously.

6. The method of claim 5 wherein said cell is an animal cell.
7. The method of claim 6 wherein said cell is a mammalian cell.
8. The method of claim 7 wherein said cell is a human cell.
9. A method for treating a tumor, said method comprising application of an effective amount of a compound of formula



wherein R_1, R_2, R_3 and R_4 independently represent –OH, OCH_3,-O(C=O)CH_3, or an amino acid residue, but are not each –OH simultaneously.

10. The method of claim 9 wherein said tumor is present in a mammal.
11. The method of claim 10 wherein said tumor is malignant.
12. The method of claim 10 wherein said tumor is benign.
13. The method of claim 12 wherein said tumor is selected from the group consisting of papilloma, teratoma and adenoma.
14. The method of claim 10 wherein said tumor is a solid tumor.
15. The method of claim 10 wherein said mammal is a human.
16. The method of claim 10 wherein said tumor is derived from transformed cells.
17. The method of claim 16 wherein said cells are C3 cells.
18. The method of claim 9 wherein said compound is administered along with at least one pharmaceutically acceptable excipient or carrier.
19. The method of claim 18 wherein said excipient or carrier is dimethylsulfoxide.
20. The method of claim 9 wherein said derivative is tetra-O-methyl nordihydroguaiaretic acid or tetraglycinyl nordihydroguaiaretic acid.
21. The method of claim 1 wherein tetraglycinyl nordihydroguaiaretic acid is administered along with at least one pharmaceutically acceptable excipient or carrier.